Abuse Histories in 102 Cases of Multiple Personality Disorder*

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The authors interviewed 102 individuals with clinical diagnoses of multiple personality disorder at four centres using the Dissociative Disorders Interview Schedule. The patients reported high rates of childhood trauma: 90.2% had been sexually abused, 82.4% physically abused, and 95.1% subjected to one or both forms of child abuse. Over 50% of subjects reported initial physical and sexual abuse before age five. The average duration of both types of abuse was ten years, and numerous different perpetrators were identified. Subjects were equally likely to be physically abused by their mothers or fathers. Sexual abusers were more often male than female, but a substantial amount of sexual abuse was perpetrated by mothers, female relatives, and other females. Multiple personality disorder appears to be a response to chronic trauma originating during a vulnerable period in childhood.

Multiple personality disorder (MPD) is the psychiatric disorder most directly linked to childhood physical and sexual abuse (1-3). Previous studies have shown that over 68% of patients with MPD have histories of childhood sexual abuse, while over 60% have histories of childhood physical abuse (4-7). A history of physical and/or sexual abuse is reported in 88.5% of published case series, including this one. The clinical literature on MPD consistently supports this finding from large case series (8-10).

MPD appears to arise as a dissociative strategy for coping with and surviving childhood trauma, which can include witnessing the murder or abuse of siblings and parents, abandonment, neglect, death of primary caretakers, direct experience of war, and other forms of trauma (1). The child appears to split off the traumatic memories and feelings, creating dissociated states, which, with reinforcement and repeated trauma, develop a sense of separate identity. These manifest themselves clinically as alter personalities.

In order to document the childhood physical and sexual abuse of patients with MPD in more detail we interviewed 102 subjects with the disorder in four different centres using the Dissociative Disorders Interview Schedule (DDIS). The findings represent the first attempt to gather detailed abuse histories on a large number of people with MPD in different centres using a valid and reliable structured interview.

Methods

Subjects

Subjects were 102 individuals with clinical diagnoses of MPD in four centres: Winnipeg (n=50), Utah (n=20), California (n=17), and Ottawa (n=15). The subjects received their clinical diagnoses from a psychiatrist in Winnipeg, with the exception of four cases diagnosed by a research nurse with extensive experience in the diagnosis and treatment of MPD. Subjects in Utah were volunteers for a study for a Ph.D. dissertation, and were diagnosed by a trained social worker independently of the study. In California subjects were diagnosed by a Ph.D. psychologist or an M.A. psychological assistant, and in Ottawa by a psychiatrist. All diagnosticians had a special interest in dissociative disorders and were familiar with the literature on MPD. All subjects met DSM-III-R criteria for MPD on clinical assessment.

Procedure

All subjects were interviewed with the DDIS. The DDIS is a 131 item structured interview which takes between 30 and 45 minutes to administer to most subjects (2,11). It has an overall interrater reliability of 0.68. The interrater reliability for the presence or absence of childhood physical abuse is 1.00, and for childhood sexual abuse it is also 1.00. The instrument had a specificity of 100% and a sensitivity of 90% for the diagnosis of MPD in its original development (2,11). In our series of 102 MPD subjects, the sensitivity of the instrument for the diagnosis of MPD was 96.1% (there were four false negative diagnoses of MPD on the DDIS).

In Winnipeg, subjects were the first 50 individuals diagnosed at a dissociative disorders clinic. Almost all were given the DDIS at the time of their initial assessment. In Utah subjects were interviewed consecutively as they volunteered to participate in a study for a Ph.D. dissertation. In California

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Table I

Abuse Histories of Patients with MPD in Five Series of Patients

	Putnam (n = 100) %	Ross (n = 236) %	Current Study (n = 102) %	Coons (n = 50) %	Schultz (n = 355) %
Sexual abuse	83.0	79.2	90.2	68.0	86.0
Physical abuse	75.0	74.9	82.4	60.0	82.0
Physical and/or sexual abuse		88.5	95.1	96.0	

the subjects were assessed in a private practice. In Ottawa subjects were interviewed specifically for this project, and many were in treatment.

No investigator had met subjects from any of the other centres. All subjects gave written consent.

The raw data were forwarded to the coordinating centre (Winnipeg) for entry and analysis. The subjects at the different centres were compared to see if they differed demographically or in their abuse histories. Significance was set at $p < .05$, and the Bonferroni correction for multiple comparisons was applied (12). Items were grouped into families prior to application of the Bonferroni correction.

In comparing data from the four centres, chi-square analyses were used for dichotomous data. For continuous data, the Kolmogorov-Smirnov statistic for normality was used to determine whether or not the variables were normally distributed. Since they were not normally distributed a Kruskal-Wallis test was then used to determine significance for continuous data.

Data from the four centres were then pooled and a descriptive analysis was carried out for the entire series of 102 cases. In addition the rates of childhood physical and sexual abuse among the 102 subjects were compared to the rates of abuse in four other large series of MPD patients (4-7).

Results

Comparison of Five Large Series of Patients with MPD

As shown in Table I, the rates of childhood sexual abuse vary across five large series of MPD cases, but are always within the same range. The findings consistently document the very high rates of childhood trauma in MPD patients.

Comparison of Subjects in Four Centres

Subjects at the four centres did not differ on any of the items in this report, including demographic data, with one exception: subjects in Winnipeg had experienced fewer types of sexual abuse than those in Utah. Subjects in Winnipeg had experienced a mean of 3.3 (SD = 2.9) different forms of sexual abuse, compared to a mean of 6.7 (SD = 3.5) in Utah, (chi-square = 19.15, df = 3, $p < .0003$). With the Bonferroni correction applied, the significance level for this item was $p < .004$.

Demographic Characteristics of Subjects

Of the 102 subjects with MPD, 92 (90.2%) were female and ten (9.8%) were male. Of the 102 individuals, 49% were single, 31.4% were married, 18.6% were separated or divorced, and one percent were widowed. The average number of children per subject was 1.0 (SD = 1.4), and 43.6% of the subjects were employed.

Abuse Histories of Subjects

Information on the childhood abuse histories of the 102 subjects is presented in the tables. As shown in Table I, 90.2% of subjects had been sexually abused as children, and 82.4% had been physically abused. Altogether, 95.1% had been physically or sexually abused or both.

The identities of the physical abusers are shown in Table II. MPD patients were found to have been physically abused equally as often by their mothers and fathers. Overall, other abusers tend to be more often male than female, but a substantial number of subjects have been physically abused by women besides their mothers.

The perpetrators of sexual abuse were more likely to be male than female, as shown in Table II. However sexual abuse by females was not rare, with 15.7% of subjects having been sexually abused by their mothers.

The 102 subjects were the victims of many types of sexual abuse, as shown in Table III. For over half the subjects the abuse included intercourse prior to age 18. Participation in pornographic photography had been experienced by 20.6% of subjects.

Table IV summarizes the duration and severity of the physical and sexual abuse, which was extreme. Both forms of abuse had a mean duration of more than ten years, and a mean number of perpetrators greater than two.

Table V shows the frequency distribution for age of initial physical abuse in the 84 subjects who had been subjected to such trauma. Over 50% of subjects reported that the physical

Table II

Identities of Abusers of 102 Patients with MPD

	% of Subjects Physically Abused by This Person	% of Subjects Sexually Abused by This Person
Father	45.1	39.2
Mother	45.1	15.7
Stepfather	10.8	15.7
Stepmother	4.9	2.9
Sibling	28.4	24.5
Male relative	29.4	46.1
Female relative	16.7	10.8
Other male	46.1	62.7
Other female	20.6	21.6

Table III

Types of Sexual Abuse in 102 Patients with MPD

Types of Sexual Abuse	% of Subjects Reporting This Type
Hand-genital contact	77.5
Other types of fondling	76.5
Intercourse	54.9
Performing oral sex on a male	52.9
Oral sex performed on patient by a male	52.9
Passive anal intercourse	37.3
Simulated intercourse with a female*	24.5
Performing oral sex on a female	20.6
Pornographic photography	20.6
Oral sex performed on patient by a female	19.6
Forced sex with animals	13.7

* female subjects only

ıbuse began prior to age five. Only six subjects (5.9%) eported that the physical abuse began at age ten or older.

Table V also shows the frequency distribution of the age of initial sexual abuse in the 92 subjects subjected to this form of trauma. Again, over 50% of subjects reported that the exual abuse started before age five. Only 13 subjects (12.7%) eported that the sexual abuse began at age ten or older.

Sexual abuse after age 18 was also common. Data on sexual abuse after age 18 were missing for 22 subjects from Winnipeg; of the remaining 80 subjects, 32 (40%) had not been sexually abused after age 18; 16 (20%) had been abused between one and five times; none had been abused between six and ten times; seven (9%) had been abused between 11 and 50 times; 12 (15%) had been abused more than 50 times; and 13 (16%) replied that they were unsure about the number of times. Sexual abuse is defined for DDIS respondents as follows: "Sexual abuse includes rape, or any type of unwanted sexual touching or fondling you may have experienced."

Discussion

These findings represent the first documentation of the abuse histories of a large series of MPD diagnosed patients with a reliable structured interview. The findings are consistent with previous large series of patients with MPD, as shown in Table I, and with the clinical literature (4-7). MPD is linked to high rates of reported childhood physical and sexual abuse. When three large series totalling 388 cases were pooled, it was found that 91.2% of patients had been physically or sexually abused or both prior to age 18. These figures are likely to be conservative estimates of the frequency of childhood abuse in MPD patients because 81.4% of our 102 subjects reported amnesia for large parts of childhood. Much of the abuse may still have been hidden by amnesia at the time of structured interview. The DDIS cannot provide independent confirmation of the abuse histories, nor can it rule out fabrications. However in the only published attempt to gather corroborating evidence of the abuse reported by patients with MPD, Coons and Milstein (13) were able to confirm the abuse in 17 out of 20 (85%) of cases. There has not been a single confirmed report of an entirely fabricated abuse history in a patient with MPD. Any overestimate of the childhood abuse by the 102 subjects in this study is likely more than corrected for by amnesia for trauma that actually occurred.

The abuse experienced by patients with MPD is severe and chronic. The average duration of sexual abuse was 11.7 years, and of physical abuse 14.0 years. In over 50% of cases, both forms of abuse began before age five. The MPD patients were sexually abused by an average of 2.3 different perpetrators, and experienced an average of 4.8 different types of sexual abuse. There was an average of 2.5 different perpetrators of physical abuse per subject.

The perpetrators of physical abuse were most frequently mother, father, other males besides stepfathers, male relatives and siblings. Although males were responsible for more physical abuse than females, women were frequent perpetrators. Patients had been physically abused by their mothers as often as by their fathers. Because there were only ten males in this

Table IV

Number of Abusers, Duration of Abuse and Number of Types of Abuse in 102 Patients with MPD

	Average for 102 Subjects
Duration of physical abuse	14.0 years
Number of physical abusers per subject	2.5
Duration of sexual abuse	11.7 years
Number of sexual abusers per subject	2.3
Number of types of sexual abuse per subject	4.8

Table V

Frequency Distribution of Age at Initial Abuse in Patients with MPD

Age at Initial Abuse	Physical Abuse Subjects (n = 84)	Physical Abuse Cumulative %	Sexual Abuse Subjects (n = 92)	Sexual Abuse Cumulative %
< 1	18	20.2	10	10.6
1	4	24.7	6	17.0
2	7	32.6	9	26.6
3	10	43.8	11	38.3
4	7	51.7	15	54.3
5	3	55.1	5	59.6
6	6	61.8	6	66.0
7	5	67.4	6	72.3
8	2	69.7	4	76.6
9	1	70.8	2	78.7
Unsure	14	87.5	5	83.6
> 10	6	98.8	13	100.0
No response	1	100.0		

series, the abuse histories of males and females were not compared. It is important to determine if males with MPD have been sexually abused by their mothers more or less often than females have been sexually abused by their fathers, for instance.

It is possible that increasing the number of males in a series of MPD patients would bring the rates of sexual abuse by mother and father closer together. This would make sense if mothers are as abusive overall as fathers, as suggested by the data on physical abuse. The majority of mothers are likely to be heterosexual and therefore more likely to sexually abuse their sons than their daughters. It is important to emphasize that one cannot extrapolate directly from such findings to the general population, however.

Evidence from a series of 236 cases of MPD indicates that males with the disorder have the same rates of physical and sexual abuse, rape and participation in prostitution as females (14). These data also indicate that MPD is a disorder arising from abuse by both men and women. In the five clinical series shown in Table I the overall female to male ratio is 8.7 to 1. It is our hypothesis that this ratio is lower in the general population due to selection bias in clinical samples. If this is the case, MPD is a disorder of both males and females arising from physical and sexual abuse of childhood by both men and women.

Based on our data about age at onset of the abuse, there appears to be a vulnerable period for MPD: it appears that almost all individuals diagnosed as having MPD have been abused prior to age ten, and the majority before age five (15). It is unlikely that a multiple personality disorder would develop as a survival strategy if the onset of the abuse is in adolescence or later. In addition, it also appears that for an MPD to develop the abuse must be severe and chronic. We conclude from these data and our review of the clinical literature that the risk of developing MPD increases with early onset of abuse, number of abusers, degree and duration of abuse. The percentage of children under age five who are at high risk of developing MPD if exposed to severe enough ongoing abuse is uncertain, but we suspect it is substantial. This would mean that MPD is not rare in the general population.

In countries where children have been exposed to intense prolonged warfare, the incidence of complex, chronic dissociative disorders may be high. These may take the form of classical North American MPD, or may be modified by cultural factors (16). It is unknown whether famine, severe poverty, endemic AIDS, or other forms of psychosocial trauma can cause MPD or other complex dissociative disorders in susceptible children.

It appears from both clinical experience and the literature on dissociation that patients for whom the abuse has a later onset and is milder or less chronic develop less complex and chronic forms of dissociation than MPD (17). Some degree of dissociative symptomatology may occur in most individuals if the trauma is systematic and deliberate, such as political torture, or brainwashing by a cults (1).

The data identify populations of children and adults that are at risk of developing MPD. For example, 20.6% of the 102 subjects had participated in child pornography, which is a large industry in North America. Previous research has identified high rates of MPD and other dissociative symptoms in prostitutes and exotic dancers, two groups in which one would expect to find victims of childhood pornography (17). Since participation in childhood pornography is common in patients with MPD, one would want to know the inverse relationship: how many participants in childhood pornography have MPD or other dissociative disorders?

MPD is the most complex dissociative response to severe childhood trauma. The study of adults with MPD in North America might teach us a great deal about the range of dissociative responses to both physical and psychosocial trauma. For instance, dissociation might be endemic in populations exposed to severe, chronic cultural trauma. If this is the case, strategies for healing disorders caused by the trauma might be similar to those for treating patients with MPD, which often results in dramatic improvement in function and stable resolution of the dissociative disorder.

The study has a number of limitations which should be kept in mind. Subjects at the four centres were not interviewed by a single independent rater to establish the reliability of the clinical diagnoses. However, using the DDIS, 96.1% of the subjects were diagnosed as having MPD, and their symptom profiles on the rest of the instrument were consistent across centres (18), therefore one would assume a high degree of reliability.

No control or comparison group was included in the study. However previous studies have shown that MPD subjects can be differentiated from those with panic disorder, eating disorders, schizophrenia and temporal lobe epilepsy on a large number of items including child abuse using the DDIS (19,20). The fact that the childhood trauma reported in five large series of MPD subjects is consistently very high, despite the fact that each study used different questionnaires suggests that the findings in our 102 subjects are not an artefact of the DDIS. An attempt to gather outside confirmation of the duration, severity and nature of the abuse in a large series of MPD subjects would be worthwhile.

The question for future research is not whether MPD patients have histories of severe abuse, but the percentage of children with chronic, severe trauma that fail to develop a complex, chronic dissociative disorder. Children who are unable to develop a dissociation to survive chronic trauma may suffer more damage. Whether or not this is so, the relationship between childhood trauma and MPD is clearly established by thisstudy, other large published series and the clinical literature.

Summary

A study of the abuse histories of 102 subjects diagnosed as having MPD at four different centres shows that most individuals with this diagnosis have been subjected to severe. prolonged childhood physical and/or sexual abuse. For the majority of subjects, the abuse started before age five. The

rates of physical and sexual abuse are similar in the five largest published series of MPD cases totalling 843 cases.

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Résumé

En s'appuyant sur le schéma d'entretien relatif à la dissociation mentale (Dissociative Disorder Interview Schedule), les auteurs ont interrogés 102 malades qui manifestaient des personnalités multiples, dans quatre centres différents. Une forte proportion des sujets ont subi un traumatisme durant l'enfance : 90,2 % ont enduré des agressions sexuelles; 82,4 %, des sévices corporels; et 95,1 %, soit une, soit les deux formes de mauvais traitements. Plus de 50 % ont subi des sévices sexuels et corporels avant l'âge de cinq ans. Pour les deux types d'agressions, les malades mentionnent une grande variété d'auteurs et une durée moyenne de dix ans. L'incidence des sévices infligés par le père et la mère est comparable. Quoique les hommes commettent plus souvent des agressions sexuelles que les femmes, un nombre considérable de ces mauvais traitements sont perpétrés par la mère, une parente ou une autre femme. Il semble que la dissociation mentale résulte d'un traumatisme chronique qui débute pendant une période vulnérable de l'enfance.